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The Pest Management Newsletter:

News from the AAFC Pest Management Centre

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Canada

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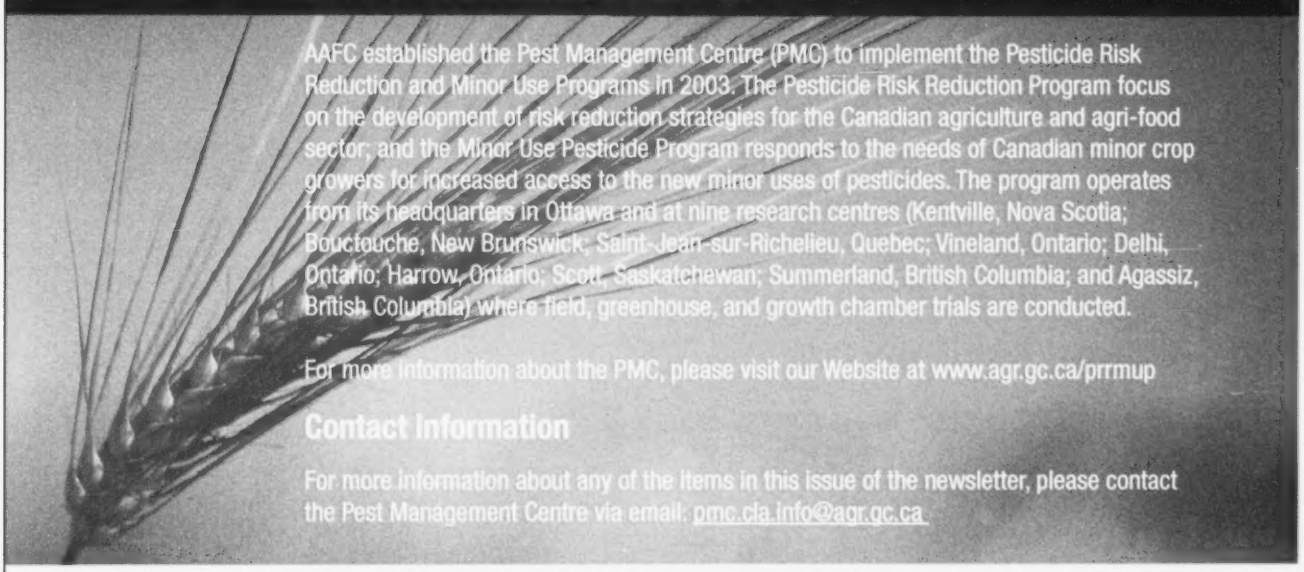

AAFC established the Pest Management Centre (PMC) to implement the Pesticide Risk Reduction and Minor Use Programs in 2003. The Pesticide Risk Reduction Program focus on the development of risk reduction strategies for the Canadian agriculture and agri-food sector; and the Minor Use Pesticide Program responds to the needs of Canadian minor crop growers for increased access to the new minor uses of pesticides. The program operates from its headquarters in Ottawa and at nine research centres (Kentville, Nova Scotia; Bouctouche, New Brunswick; Saint-Jean-sur-Richelieu, Quebec; Vineland, Ontario; Delhi, Ontario; Harrow, Ontario; Scott, Saskatchewan; Summerland, British Columbia; and Agassiz, British Columbia) where field, greenhouse, and growth chamber trials are conducted.

For more information about the PMC, please visit our Website at www.agr.gc.ca/prrmup

Contact Information

For more information about any of the items in this issue of the newsletter, please contact the Pest Management Centre via email: pmc.cla.info@agr.gc.ca

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Fruit of the Vine

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Ideally, the products used under these new registrations should attack the pests while leaving beneficial species unharmed, and applying the pesticides should be as safe as possible for both growers and the environment. Such new registrations reach the farm more quickly when growers and researchers work together, and this is where the PMC comes in: it funds research into pest controls that offer reduced health and environmental risks, and enlists both scientists and farmers to achieve these results.

Pesticide field trials are a major research tool for the program. A good example is the 2006 project carried out on Earle Muir's 42-acre farm in southern Ontario. Muir has been farming near Niagara-on-the-Lake for more than 40 years, and his family has worked the same land for five generations. He's no stranger to pesticide trials: he was on the Ontario Pesticides Advisory Committee for more than two decades, and he's been helping with agricultural research for even longer than that. He grows mostly peaches, but has winery grapes as well, and it was some of his grapevines that were "borrowed" by researchers to test the insecticide Altacor for control of the grape berry moth.

This moth is a nasty little customer whose larvae, once they hatch, burrow into the grapes and rot them from the inside. "They don't threaten the vine itself," says Muir, "but they mess up the grapes' sugar and acid content, and they can be really devastating if they get a chance to build up. Nowadays a lot of growers are controlling the moths with pheromones, which interfere with the moths' ability to mate, so they don't lay fertile eggs. Sometimes, though, you do have to spray your vines for secondary insects, and then it's really good to have these new, low-toxicity insecticides."

The anti-moth trials began with Muir assigning half a dozen outside rows of his vineyard to the research team (he's compensated for the fruit he loses to the trials). The team selected certain plants to be sprayed with Altacor, while other sections of the rows were treated with various other products; some vines were left untreated as a control. Since there are up to three generations of the moths every year, the researchers sprayed some of the test plants more than once and, at suitable times during the growing season, came back to count the larvae and assess any damage they'd caused.

The results? "Altacor works as well as the spray I've been using for years," Muir says. "It also lets me get back into the vineyard only 12 hours after spraying, which is important if I have other work to do there — when I use the older insecticide, which is broad-spectrum and very potent, I can't set foot there for 21 days. Unlike the older spray, Altacor is safe for animals that might wander through the vineyard, and apparently it's safe for bees and other beneficial insects, too. And as a bonus, we found it was a good control for Japanese beetles, which can do a lot of damage to the leaves on grapevines, cherry trees and other crops."

As a result of the trials, Altacor has been registered for the control of the grape berry moth. That's another success for the Minor Use Pesticide Program, but as you'll see when you read the rest of this issue, the PMC has been working on a lot of other things, too:

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- "Getting to Know Grasshoppers" tells you about a new field guide for identifying these pests.
- "Farmers Know Pests Best" describes the work of the annual Minor Use Pesticide Priority Setting Workshop, run by the Minor Use Pesticide Program. Did you know that, at its 2008 meeting, the workshop selected 38 crop/pest combinations as priority projects for registration by the PMC?
- And last but far from least, "Looking for Answers to Problem Pests" is the inside story of how the PMC's screening trials look for ways to deal with really awkward pests — those insects, weeds and diseases that we don't yet know how to control.

So those Altacor-treated vines on Earle Muir's farm were much more important than a quick glance would suggest; they were a small but vital part of a PMC's cooperative effort to find new ways for farmers to protect their crops. The fruits of that kind of work are just about as important as anything can be, because no matter where we live — country, town or city — we all have to eat.

Farmers Know Pests Best

What's the worst pest problem on your farm? An insect? A weed? A disease? Or all of them, because you've got one of each?

For many growers, especially those who specialize in low-acreage, high-value crops, the answer is often "all of them," because it seems there's always a sizeable crowd of bugs, moulds, fungi, rusts, blights or weeds that want to complicate your life. Some cause

Participants of the 2008 Canadian Minor Use Pesticide Priority Setting Workshop

trouble every year, while others vanish for a while but suddenly reappear when least expected — and as if that weren't enough, there's often a brand-new annoyance that hasn't shown up in your fields yet, but you know it's only a matter of time until it does.

Any of these pests can reduce yields and damage crop quality, which hurts not only the bottom line but also the reputation of Canadian farms and farmers. That's why growers need new and effective pest management tools, together with a solid understanding of how these tools can help protect their investments in planting, nurturing and harvesting their crops.

But there are many different kinds of pests. How can growers agree on which ones demand the most urgent attention?

The answer lies with the grower groups that participate in the Minor Use Pesticide Priority Setting Workshop, which is held every year by the PMC through its Minor Use Pesticide (MUP) program. Begun in 2003, the MUP program works with growers to provide improved access to newer, safer pesticides that are tailored to smaller-acreage crops such as vegetables, fruits, nursery stock and flowers.

The program has been highly successful because its activities are driven by the farmers, pesticide manufacturers, provincial extension specialists, provincial minor use coordinators and industry members who attend the workshop and who help

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Participants of the 2003 Canadian Minor Use Pesticide Priority Setting Workshop

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The program has been highly successful because its activities are driven by the farmers, pesticide manufacturers, provincial extension specialists, provincial minor use coordinators and industry members who attend the workshop and who help

identify the most serious and immediate threats from pests. More than 200 representatives attended the April 2008 event and selected 38 national priorities covering a wide variety of crop and pest problems.

Preparation for each workshop goes on during the fall and winter, as provincial minor use coordinators work with growers across Canada to develop a list of their top pest priorities and possible solutions. The PMC combines these lists and categorizes the problems by crop and type of pest. At the workshop itself, the participants reach a consensus on a national list of pest-management projects for field trials by the PMC. These trials assess the effectiveness of the control being evaluated, the crop's tolerance for it and, for some controls, the levels of pesticide residues remaining in the crop at harvest.

After the trials, the PMC compiles the resulting data into a final report, which it submits to Health Canada's Pest Management Regulatory Agency (PMRA) for evaluation and decision. Once evaluated and deemed acceptable under Canadian standards, the new use of the pesticide is registered so Canadian growers can put it to work on their farms. Since 2003, the PMC has conducted more than 3000 field trials, and more than 130 submissions have been made to the PMRA on behalf of growers. As a result, Canadian farmers have gained access to dozens of new ways of controlling pests.

Having a broad range of pest-control choices is highly important for growers because it allows them to use a customized selection of mechanical, genetic, biological and chemical tools to create their own integrated pest management (IPM) strategies. A good IPM strategy, moreover, can not only keep the pests in their place, but can also reduce a grower's pest-control costs while being sustainable and environmentally responsible.

"Registration of new product uses has exploded with this program," says Richard Wera, a Quebec strawberry grower who has attended the workshops for several years. "New products used to come our way only once in a while, but today we see new registrations moving steadily through the system. Producers require a continuous stream of such registrations, so I'm very happy to see them happening — every year we present problems, and every year we get solutions."

Looking for Answers to Problem Pests

Every problem, it's said, has a solution. Sometimes, however, the solution hasn't yet been found, and its absence can be a big worry if the problem is an agricultural pest that has no known controls. For farmers, finding a way to deal with such a bug, weed or blight can mean the difference between turning a profit and losing money, or even growing the crop at all.

Discovering controls for such intractable pests is the goal of the PMC's screening trials for priority projects

for which pest management solutions are not known. Unlike the usual PMC field tests, which generally lead to a minor-use label expansion for a given product, these screening trials target pest problems for which there are no obvious control products.

Growers are the main source of information about the most urgent threats. At each annual Minor Use Priority Setting Workshop, growers and the PMC jointly identify two APWS (A Priority Without Solution) problems in each of the three categories of diseases, insects and weeds, and set priorities for investigating them. The PMC then commissions the necessary screening trials, which focus on pesticides that may provide reduced-risk controls for the pests in question. Experts and stakeholders review the research results and, if the trials suggest a possible control, it may be selected as one of the project priorities at the following year's Priority Setting Workshop. Following its selection, the potential control goes to the PMC's normal field trials, which gather data so that the new use can be registered and growers can start benefiting from it.

Since 2006, the PMC has undertaken 12 such trials, including those begun in spring 2008. They have included:

- In pathology: green mould in mushrooms, fire blight of pome fruit such as apples and pears, Verticillium wilt of potato, Phytophthora root rot of caneberries, leaf diseases of low-bush blueberries, needle cast of conifers and clubroot of cruciferous vegetables and canola.
- In entomology: harvest pests on raspberry fruit, and apple clearwing moth and dogwood borer on pome fruits.
- In weeds: broadleaf weeds in ginseng, broadleaf weeds in processing peas and broadleaf weeds in Crop group 4 leafy vegetables.

Promising solutions have been identified in five of the trials, and results have been presented to stakeholders for potential follow-up by the PMC. This will be very good news for growers who have put time, effort and money into these crops and who don't want to see them ruined by unmanageable pests.

Getting to Know Grasshoppers

If you're farming in western Canada and grasshoppers are making a banquet of your crops, you could be forgiven for feeling like getting rid of them all. However, only about 10 of the 80 grasshopper species on Canada's prairies cause crop-loss problems in any typical year. Even among these, a mere five or six species are the real culprits when it comes to feasting on pulses, oilseeds, cereals and forages, or chewing up rangeland and pastures. Some types of grasshoppers are even beneficial, since they're food for birds and other animals and thus play an important part in the prairie's ecosystems.

But how do you tell a good grasshopper from a bad one? It's no idle question, since the ability to distinguish between them can help you determine whether there's a real threat from the grasshoppers you're seeing on your farm. If they're the friendly types, leaving them alone will save you money that can be better spent elsewhere, and is good for the environment into the bargain.

Part of the answer is a pocket-size booklet called *Grasshopper Identification and Control Methods*. This grower's field guide to grasshoppers and grasshopper management was developed jointly by Pulse Canada, Saskatchewan Pulse Growers and Dr. Dan Johnson of the University of Lethbridge, with the financial support of Agriculture and Agri-Food Canada's PMC. Published in 2006 by Saskatchewan Pulse Growers, the guide promptly won an Award for Excellence from the International Communicator Awards organization.

The guide was an even bigger success among farmers in western Canada. To respond to the high demand, the PMC funded the development of a new, expanded edition of the booklet called *Grasshopper Identification and Control Methods to Protect Crops and the Environment*, which came out in May 2008. This new edition provides text descriptions and colour photographs of more than 25 common types of grasshoppers to help identify each species. The

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descriptions give the distinguishing characteristics of both the adult grasshoppers and their juvenile growth stages, and categorize each species as high threat, low-threat or beneficial. There's also a review of integrated pest management (IPM) strategies for grasshopper control, which can help you decide whether your crop is in danger from the insects and, if it is, where and when you should use pesticides.

The guides are free of charge, and thousands of copies of both editions have already been distributed to growers. So if you've ever had a grasshopper problem, or if you think grasshoppers may be threatening your crops, you'll definitely want your own copy of the booklet.

Beating the Blight

If you're gazing across a field of green wheat, the very last thing you want to see is a tinge of light brown here and there. Those tan-coloured, partly bleached heads are a sure sign of Fusarium head blight (FHB), a devastating disease that can, under the right conditions, destroy half the wheat you've planted and badly degrade the quality of the rest.

FHB is caused by a fungus called *Fusarium graminearum*. The infection not only reduces grain yield and quality, but also leads to kernel contamination with deoxynivalenol (DON) and other mycotoxins that can harm livestock and threaten the safety of human food. FHB is the most important of all wheat diseases and costs North American growers upwards of a billion dollars every year.

In response to the FHB threat, the PMC's Pesticide Risk Reduction Program has funded the development of an improved, Site-Specific DONcast predictor, which helps Ontario farmers protect their wheat crops from the ravages of the disease. The predictor operates on a weather-based model that uses historic climate patterns, current weather conditions and local weather forecasts to predict the harvest-time levels of DON toxins in the wheat. The predictions are refined using further data, such as wheat variety, field history and tillage practices. Armed with this knowledge, Ontario wheat growers can anticipate the likely DON levels in their harvests and decide whether applying fungicides might help keep them down. This leads to better wheat yield and quality, and helps farmers reduce fungicide use by determining if and when they need it to protect their crops.

Supported by financing from the Ontario Wheat Producers' Marketing Board and Bayer CropScience Canada, the DONcast advisory service was accessible free of charge to users in 2008 by subscription through the Weather INnovations Incorporated (WIN) Website at www.weatherinnovations.com. It's been an immediate success, with 120 growers signed up by the end of the first week of operation. It's not just for growers, either — extension specialists, crop advisors and agri-businesses can all use the service to help farmers make decisions about fungicide use.

But DONcast isn't the only PMC-funded project targeting FHB management. Since April 2007, the PMC has been supporting the collection of data to identify the best timing for the application of FHB biocontrol agents, and has been monitoring the effects of these agents on FHB toxin levels in crops. The results of these projects will help wheat growers control FHB while cutting back on their use of fungicides — a result that will improve both their bottom line and the natural environment.

2008 Regulatory Submissions and Registrations*

Submissions April to September

Crop	Pest	Product	Active Ingredient	Project Number
Cherry	Oriental Fruit Moth, Western Cherry Fruit Fly	Assail 70WP	acetamiprid	AAFC04-043
Corn, seed	Labelled Weeds	Callisto 480SC	mesotrione	AAFC08-071
Corn, sweet	Labelled Weeds	Callisto 480SC	mesotrione	AAFC08-072
Endive	Phytophthora root rot (*Phytophthora* sp. and *P. cryptogea*)	Aliette WDG	fosetyl-al	AAFC03-063
Peach	Oriental Fruit Moth, Western Cherry Fruit Fly	Assail 70WP	acetamiprid	AAFC04-044
Pepper, field	Phytophthora blight (*Phytophthora capsici*)	Kocide 2000/Tanos 50 DF	copper compounds cymoxanil + famoxadone	AAFC07-020
Plum	Oriental Fruit Moth, Plum Curculio, Western Cherry Fruit Fly	Assail 70WP	acetamiprid	AAFC04-045

Registrations April to September

Crop	Pest	Product	Active Ingredient	Project Number
Apple	Apple Maggot	GF-120 Fruit Fly Bait	spinosad	BPI07-100
Bean, snap	White Mold (*Sclerotinia sclerotiorum*)	Allegro 500F Agricultural Fungicide	fluazinam	AAFC03-070
Blueberry, highbush	Anthracnose, Mummy Berry	Allegro 500F Agricultural Fungicide	fluazinam	AAFC03-082
Blueberry, highbush	Weevils	Actara 25WG	thiamethoxam	AAFC07-035
Broccoli	Clubroot (*brassica*)	Allegro 500F Agricultural Fungicide	fluazinam	AAFC03-018
Cabbage	Clubroot (*brassica*)	Allegro 500F Agricultural Fungicide	fluazinam	AAFC03-066
Carrot	Damping off (*Pythium* sp.) Forking (*Pythium* sp.) Cavity spot (*Pythium* spp.)	Ranman 400SC	cyazofamid	AAFC04-080
Grape	Climbing Cutworms, Grape Berry Moth	Altacor 35 WG	chlorantraniliprole	AAFC05-062
Lettuce, greenhouse	Fungus Gnats	Citation 75 WP	cyromazine	AAFC03-013
Mustard greens	Clubroot (*brassica*)	Allegro 500F Agricultural Fungicide	fluazinam	AAFC03-067
Onion, dry bulb	Downy mildew (*Peronospora* spp.)	Reason 500SC	fenamidone	AAFC07-014
Onion, green	Downy mildew (*Peronospora* spp.)	Reason 500SC	fenamidone	AAFC07-017
Ornamental, greenhouse	Downy mildew (*Peronospora* spp.)	Acrobat 50 WP Fungicide	dimethomorph	AAFC06-021
Peach	Oriental Fruit Moth, Peach Twig Borer	Altacor 35 WG	chlorantraniliprole	AAFC05-060
Radish	Damping off	Apron XL LS	metalaxyl-m	AAFC05-005

*** The Pest Management Centre prepares a submission based on data collected from field, greenhouse, growth rooms, and laboratory analyses. The data package is submitted to the Health Canada's Pest Management Regulatory Agency (PMRA) to support the registration of the new use pattern. The PMRA reviews the submission and decides if the requested use pattern is acceptable for use in Canada. Once registered, the product can be used according to the label.**

descriptions give the distinguishing characteristics of both the adult grasshoppers and their juvenile growth stages, and categorize each species as high threat, low-threat or beneficial. There's also a review of integrated pest management (IPM) strategies for grasshopper control, which can help you decide whether your crop is in danger from the insects and, if it is, where and when you should use pesticides.

The guides are free of charge, and thousands of copies of both editions have already been distributed to growers. So if you've ever had a grasshopper problem, or if you think grasshoppers may be threatening your crops, you'll definitely want your own copy of the booklet.

Beating the Blight

If you're gazing across a field of green wheat, the very last thing you want to see is a tinge of light brown here and there. Those tan-coloured, partly bleached heads are a sure sign of Fusarium head blight (FHB), a devastating disease that can, under the right conditions, destroy half the wheat you've planted and badly degrade the quality of the rest.

FHB is caused by a fungus called *Fusarium graminearum*. The infection not only reduces grain yield and quality, but also leads to kernel contamination with deoxynivalenol (DON) and other mycotoxins that can harm livestock and threaten the safety of human food. FHB is the most important of all wheat diseases and costs North American growers upwards of a billion dollars every year.

In response to the FHB threat, the PMC's Pesticide Risk Reduction Program has funded the development of an improved, Site-Specific DONcast predictor, which helps Ontario farmers protect their wheat crops from the ravages of the disease. The predictor operates on a weather-based model that uses historic climate patterns, current weather conditions and local weather forecasts to predict the harvest-time levels of DON toxins in the wheat. The predictions are refined using further data, such as wheat variety, field history and tillage practices. Armed with this knowledge, Ontario wheat growers can anticipate the likely DON levels in their harvests and decide whether applying fungicides might help keep them down. This leads to better wheat yield and quality, and helps farmers reduce fungicide use by determining if and when they need it to protect their crops.

Supported by financing from the Ontario Wheat Producers' Marketing Board and Bayer CropScience Canada, the DONcast advisory service was accessible free of charge to users in 2008 by subscription through the Weather INnovations Incorporated (WIN) Website at www.weatherinnovations.com. It's been an immediate success, with 120 growers signed up by the end of the first week of operation. It's not just for growers, either — extension specialists, crop advisors and agri-businesses can all use the service to help farmers make decisions about fungicide use.

But DONcast isn't the only PMC-funded project targeting FHB management. Since April 2007, the PMC has been supporting the collection of data to identify the best timing for the application of FHB biocontrol agents, and has been monitoring the effects of these agents on FHB toxin levels in crops. The results of these projects will help wheat growers control FHB while cutting back on their use of fungicides — a result that will improve both their bottom line and the natural environment.

2008 Regulatory Submissions and Registrations*

Submissions April to September

Crop	Pest	Product	Active Ingredient	Project Number
Cherry	Oriental Fruit Moth, Western Cherry Fruit Fly	Assail 70WP	acetamiprid	AAFC04-043
Corn, seed	Labelled Weeds	Callisto 480SC	mesotrione	AAFC08-071
Corn, sweet	Labelled Weeds	Callisto 480SC	mesotrione	AAFC08-072
Endive	Phytophthora root rot (*Phytophthora* sp. and *P. cryptogea*)	Aliette WDG	fosetyl-al	AAFC03-063
Peach	Oriental Fruit Moth, Western Cherry Fruit Fly	Assail 70WP	acetamiprid	AAFC04-044
Pepper, field	Phytophthora blight (*Phytophthora capsici*)	Kocide 2000/Tanos 50 DF	copper compounds cymoxanil + famoxadone	AAFC07-020
Plum	Oriental Fruit Moth, Plum Curculio, Western Cherry Fruit Fly	Assail 70WP	acetamiprid	AAFC04-045

Registrations April to September

Crop	Pest	Product	Active Ingredient	Project Number
Apple	Apple Maggot	GF-120 Fruit Fly Bait	spinosad	BPI07-100
Bean, snap	White Mold (*Sclerotinia sclerotiorum*)	Allegro 500F Agricultural Fungicide	fluazinam	AAFC03-070
Blueberry, highbush	Anthracnose, Mummy Berry	Allegro 500F Agricultural Fungicide	fluazinam	AAFC03-082
Blueberry, highbush	Weevils	Actara 25WG	thiamethoxam	AAFC07-035
Broccoli	Clubroot (*brassica*)	Allegro 500F Agricultural Fungicide	fluazinam	AAFC03-018
Cabbage	Clubroot (*brassica*)	Allegro 500F Agricultural Fungicide	fluazinam	AAFC03-066
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Pesticide Risk Reduction Technical Working Group Annual Meeting 2008

The Pesticide Risk Reduction Technical Working Group (TWG) held its fourth annual meeting on April 4th, 2008 at the Hampton Inn in Ottawa. The Pesticide Risk Reduction Program team gave several presentations that highlighted the program's accomplishments and challenges during the past five years.

During the workshop, the TWG concentrated on several important matters:

- The group discussed a plan that would strengthen the program's emphasis on reducing identified pesticide risks.
- In a breakout session, the TWG explored the provincial and organizational contexts in which growers adopt pest management tools that have been developed through PMC funding. The intent was to find out how the PMC could better inform growers of the results of PMC-funded research.

  A great deal of detailed information was collected from the participants during this session. The Pesticide Risk Reduction Program will use this information to make sure that technologies developed with program funding are transferred more efficiently to growers.
- After a working lunch, representatives of the Pest Management Regulatory Agency described the newly formed Agricultural Risk Reduction and Minor Use Section (ARRMUS) and its contribution to strategies for reducing pesticide risk.

Minor Use Technical Working Group Meetings, April–May 2008

The Minor Use Technical Working Group held a meeting on April 4th, 2008, which was followed on May 27th by a conference call. These meetings had three purposes:

- to update the group on the Minor Use Summit that took place in Rome in 2007;
- to discuss the process used for the Minor Use Priority Setting meetings; and
- to discuss issues of data protection and confidential business information.

In summary, the discussions dealt with the following issues:

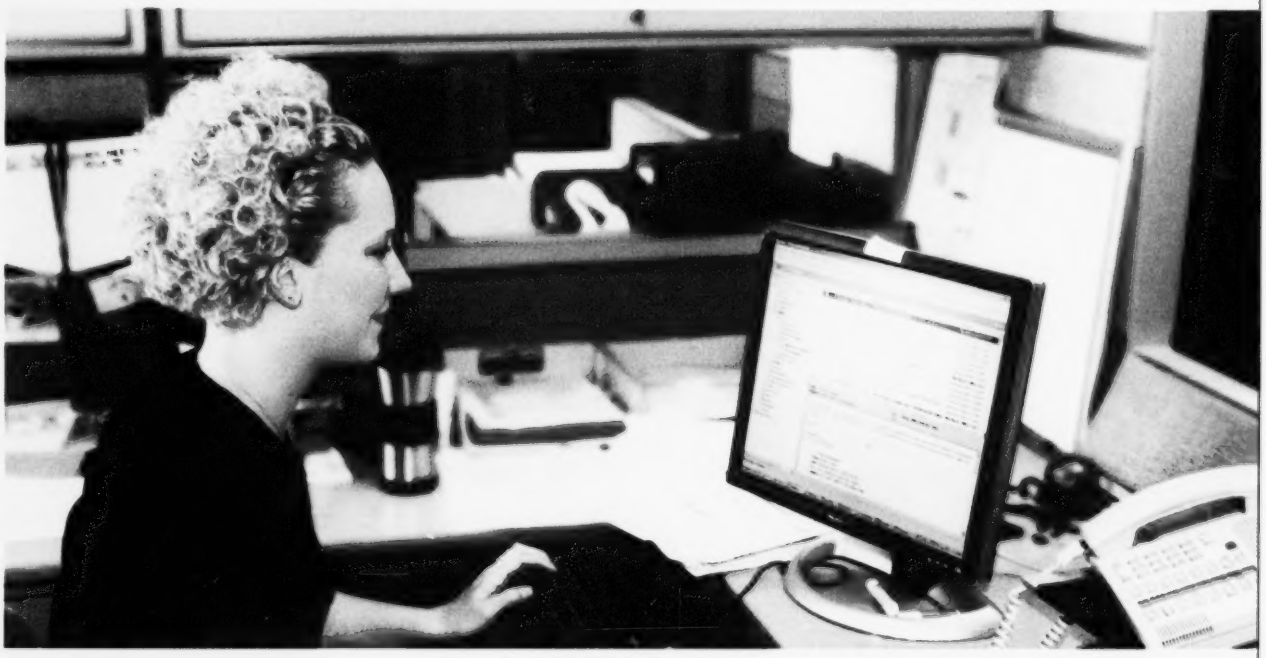
- One of the long-term goals of the Minor Use Summit was to develop a global minor use database. As a first step, a web-based portal has been established on the website of the IR-4 program. The portal provides links to several minor use websites and databases around the world.
- The participants suggested changes to the conflict resolution process to deal with situations in which growers choose more than the maximum number of priorities for the Priority Setting Meeting. In such cases, if growers cannot agree on modifying their priorities, provincial minor use coordinators will make the final selection. It was also agreed that registrants' representatives should remain available during this process so they can answer questions about their products.
- The participants discussed the development of guidelines for the priority selection process, such as harmonizing national and provincial priority rankings, and limiting the number of pest problems per crop that may be chosen. They also examined the possibility of including more AAFC researchers in the meetings, and of limiting the number of company representatives who may attend the meeting each day.

- Protection of data and of confidential business information is a major incentive that will encourage registrants to pursue minor use label expansions. It was decided that the Pest Management Regulatory Agency and CropLife Canada would continue to discuss the types of data that would be protected and how this protection could be achieved.

What's New on the PMC Website?

If you're looking for information about recent developments in pest control, be sure to visit our website. Here's what's been happening since our last newsletter:

- We've published the National Priority Lists and Selected National Priorities on the Minor Use Crop and Pest Problems page. Chosen by the 2008 Minor Use Pesticide Priority Setting Workshop, these priorities will become research projects within the Minor Use Research Program for the 2009 growing season.
- Soybean growers have a new tool to improve management of soybean aphids. It's a set of field scouting and threshold cards that describe techniques for estimating aphid counts and for identifying soybean aphids and their most important natural enemies. Growers can use the information on the cards to decide whether the aphids' natural enemies are keeping them in check, or if the aphid population has passed the threshold at which an insecticide is needed. This approach promotes natural control of aphids by protecting their natural enemies from unnecessary insecticide use, reduces pest-control costs for growers and encourages reduced-risk pest management.
- Researchers at Agriculture and Agri-Food Canada in Charlottetown have developed a device called the ECB crusher to control the overwintering larvae of the European corn borer. Attached to the back of a harvester while the potatoes are being harvested, the device crushes the potato stems and the corn borer larvae hiding inside them.
- The results of PMC Implementation Projects, such as research into greenhouse-crop biofungicides, are regularly posted on our website. Be sure to check on these projects from time to time — one of them may have exactly what your farm needs for better, cheaper and more environmentally friendly pest control.



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November 19–20, 2008
Scottsdale, Arizona

Canadian Weed Science Society 2008 Annual Meeting
November 25–27, 2008
Banff, Alberta

2009 AAFC Minor Use Research Sites Meeting
January, 2009
Ottawa, Ontario

2009 Canadian Minor Use Pesticide Priority Setting Workshop
March 23–25, 2009
Hampton Inn Ottawa & Conference Centre
200 Coventry Road, Ottawa, Ontario

6th International IPM Symposium
March 24-26, 2009
Portland, Oregon

People on the Move

With Tim MacDonald (strategy coordinator) on parental leave until early December (congratulations, Tim!) Élyse Dubuc and Audrey Saparno, both from AAFC's Research Branch, have accepted assignments with the Pesticide Risk Reduction Program to coordinate projects and support the development of risk reduction strategies. Leslie Cass is presently Acting Manager of the program.

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